

BAKER, W. J., *A History of the Marconi Company*. New York: St. Martin's Press, 1971. 414 pp. \$12.95.

► Baker, a technical editor for the Marconi Company, has put together a book loving of both the Marconi Company and its 1897 founder and 30-year guide, Guglielmo Marconi. Based extensively upon company archives (but not footnoted), the volume attempts to weave together the engineering contributions of Marconi and others and actual descriptions of some of the more important principles and developments in radio, radar, television and other electronic areas in the 1897-1965 years. The 1965 year was historically a convenient stopping point; the company, of course, is still going strong.

For the lay reader, the going is often tough, although doubtless electrical engineers will find this a fascinating account of technological history. Sometimes accompanied by diagrams, sometimes not, this is the type of sentence one often confronts: "This arrangement [described in feet and angles] provided omni-directional radiation, horizontally polarized."

The general scientific story is revealing. Very clearly, a half century of development in the electronic industry illustrates the decline of the brilliant, often erratic, "lone wolf" inventor. By the 1950s and 60s, the team "mass attack" approach to problems was the dominant mode. As in communication science, there are examples of scientists trying to locate theory to support the phenomena they observed—in the discovery of the radio wave-reflecting power of the ionosphere, for example. Likewise, as in other scientific areas, the Marconi story shows that war, a Jekyll and Hyde, generated enormously rapid and creative growth of the electronics in-

dustry, just as World War II did with content analysis within communication science.

Although the book could certainly reveal more of Marconi as a man, it includes some anecdotes to show the more human side of the early days of radio. During the experimental days of broadcasting, the Australian prima donna Nellie Melba was persuaded, in 1920, to give a radio performance. She was shown the transmitting equipment and towering antenna masts. It was from the top of those wires, the engineer in charge told her that her voice would be carried "far and wide." "Young man," she explained, "if you think I am going to climb up there you are greatly mistaken."

On the whole, it is not a very critical book and is often technical, but its story of the growth of a fledgling industry—which Marconi skillfully used newspapers to promote—into a complex, industrial giant is a revealing story of the technological forces which, since the 19th century, have been reducing the horse-whipped editor to a cipher. That's progress, I guess.

DONALD L. SHAW

University of North Carolina
